D42.1

Project internal and external IT communication infrastructure

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Abstract:	This deliverable briefly describes the tools provided within the IT infrastructure to facilitate cooperation and coordination
Keywords:	Collaborative tools, infrastructure, internal communication

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Chapter 1   Introduction

This deliverable provides an overview of the EURO-MILS project IT infrastructure and the whole set of tools that foster cooperation within the project, coordination and dissemination to the public. Technikon has developed this system for distributed project collaboration in recent years. This trusted collaborative toolbox was awarded an Austrian ICT innovation prize[1]for its security and completeness. The toolbox was incorporated into the architecture which was initiated and configured for EURO-MILS.

All tools use encrypted communication paths and can be configured to work through corporate firewalls that allow encrypted web traffic (SSL[2]).

The following picture presents the overall architecture of the IT infrastructure in EURO-MILS:
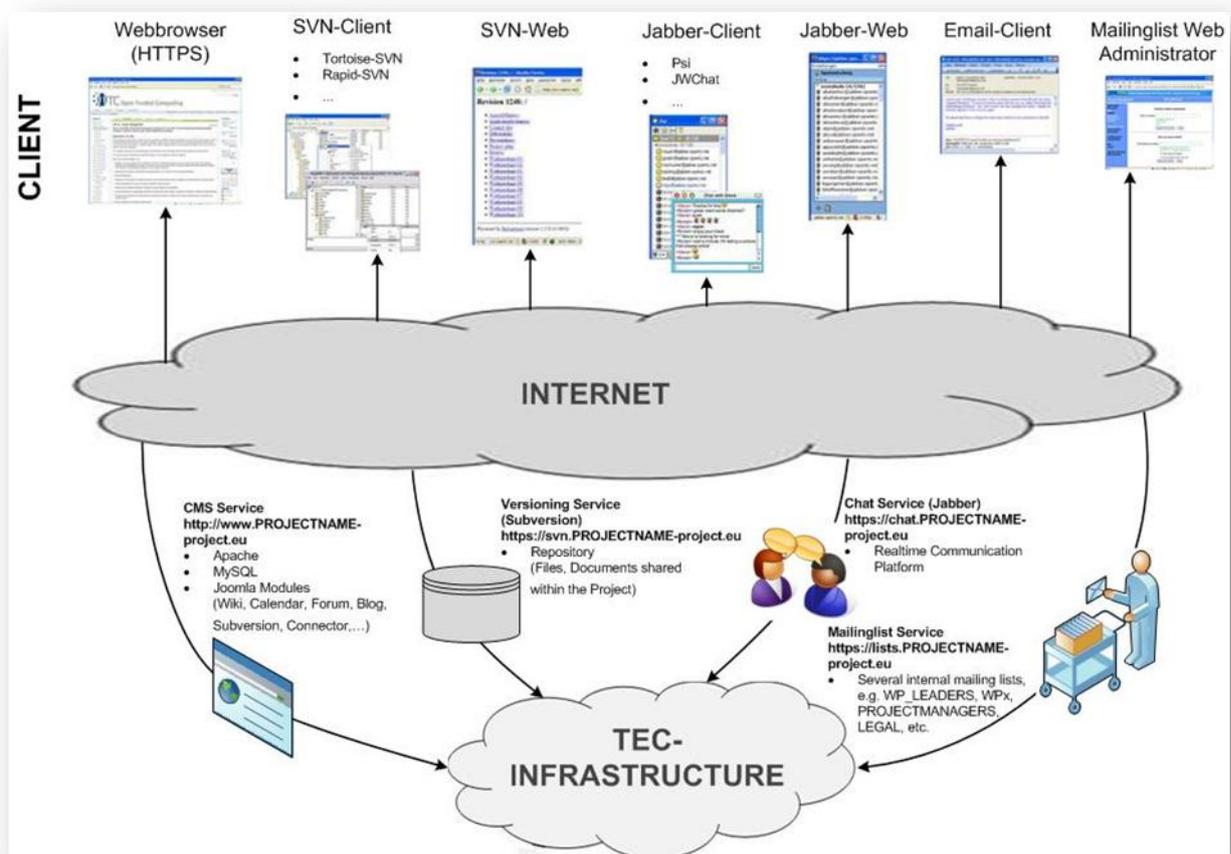

Figure 1: EURO-MILS project IT infrastructure

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[1] https://www.technikon.com/index.php?option=com_content&view=article&id=76&Itemid=79
[2] Secure Sockets Layer – Protocol for a secure connection

Chapter 2   Collaborative tools

A set of collaborative tools are provided by the coordinator to facilitate the cooperation within the project and to assist in the coordination work. These tools are:

- A protected online workspace (CMS[3]),
- A private instant messaging server, with the possibility of encrypted communication,
- A versioning system for keeping track of documents, and
- A mailing list system for information exchange.

2.1   Protected workspace

The collaborative workspace is using the same platform as the website. The users log in to the workspace from the website and are then presented with the additional protected information accessible through a separated user menu. Once logged in, the users have read and write access to several useful and practical features such as a calendar or the SVN-Repository. The *"Your Profile"* functionality allows the user to change his personal details and password. Moreover, the menu item *"Documentation"* provides helpful links and documentation concerning the internal IT infrastructure and SVN. With the mailing list connector in the protected workspace it is also possible for each user to subscribe to the different mailing lists online. Figure 2 illustrates the content of the restricted area.
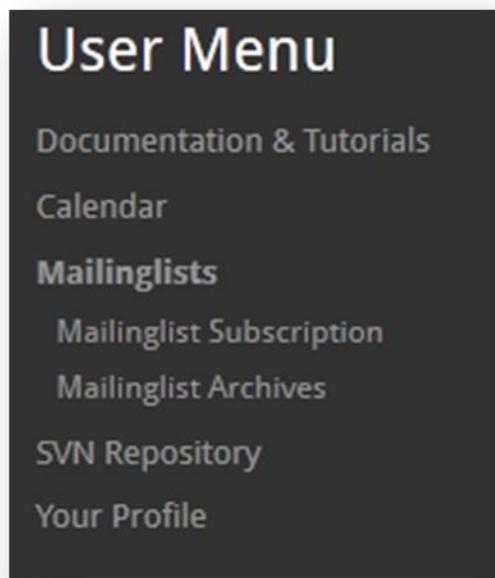

Figure 2: Content of restricted area

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[3] Content Management System – is used to build complex websites easily

2.2 SVN Server

The Subversion server allows easy synchronization of documents between the server and a participant's local file storage. The system includes tools for retrieving older versions of a particular file, resolving conflicts between different versions of the same file and locking files for local editing. A versioning file server is provided for easy synchronization of project information and for use as a code repository.

This is a very useful software tool for sharing documents within a project. It is a central file repository where all project partners can get access to the required documents.

Some major advantages are for example:

- Offline availability of the data via SVN clients (stored on your local hard disc)
- Read-only access via HTTPS[4] (Web Browser)
- Read-Write Access via WebDAV[5] Connection
- Synchronizing the data between Client/Server
- all former versions of the file are available and reproducible
- User authentication with group based privileges via ACLs (Access Control Lists)
- Email notification on activity (e.g. "commit" action)

2.2.1 Local SVN Checkout

To get a feeling of how to handle the connection to the SVN Server the following chapter shows a short introduction on installing and using the software tool:

a.) Create and download the repository:

- Download and install the subversion client.

  The rest of this instruction will assume that you have installed the TortoiseSVN client, which can be downloaded from http://tortoisesvn.net/downloads. For the installation of the client please follow the instructions written on the homepage.

- Create a folder on a local disk. For example C:\SVN\EUROMILS
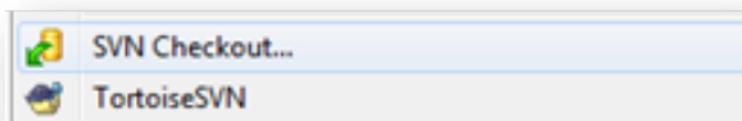- Right click on the folder and choose "SVN Checkout"

Figure 3: SVN Checkout (a)

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[4] Hypertext Transfer Protocol Secure – used for a secure connection between Browser and Web server
[5] Web-based Distributed Authoring and Versioning

- Use https://euromils.technikon.com as the URL of the repository. Everything else can be left as it is. Make sure that "**HEAD revision**" is checked.
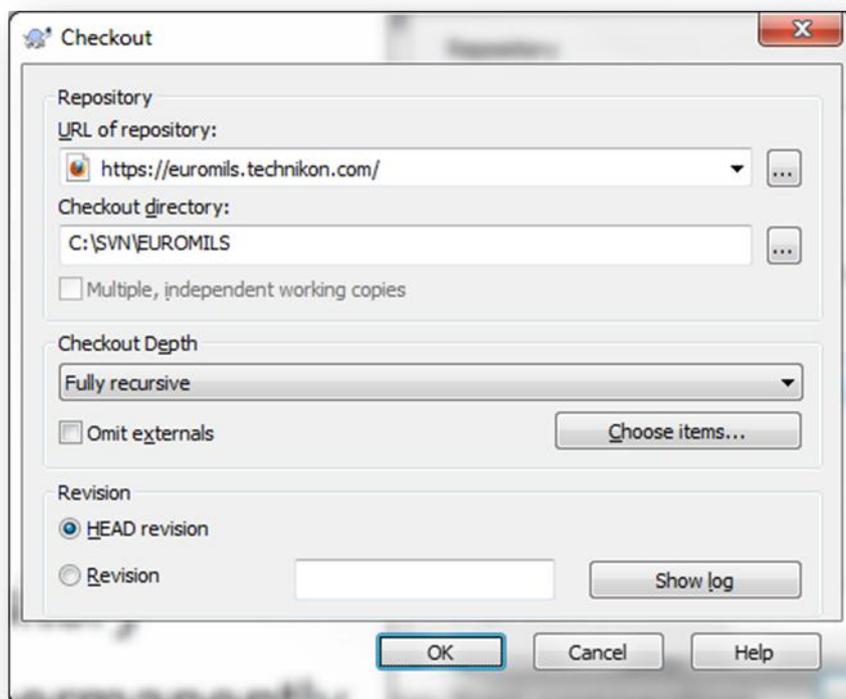

Figure 4: SVN Checkout (b)

- Authorization for EURO-MILS SVN is required: Insert your username and password.
- Download the content of the repository to the newly created folder. This might take a while, depending on the bandwidth and the size of the repository.
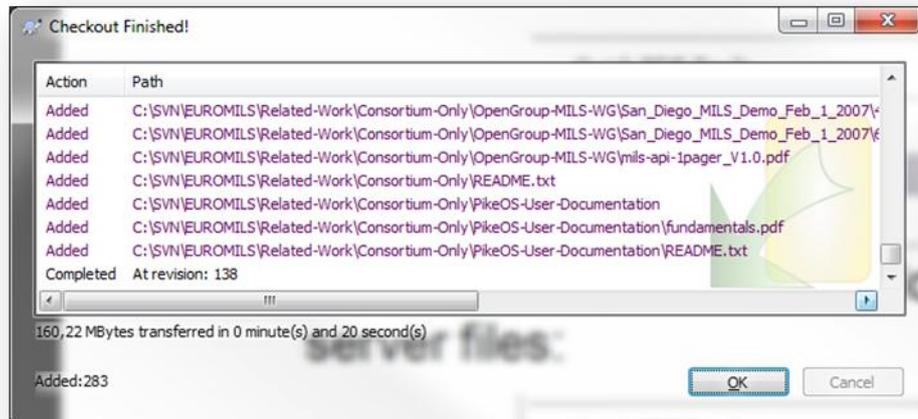
Figure 5: Download content from repository

b.) Keeping up to date:

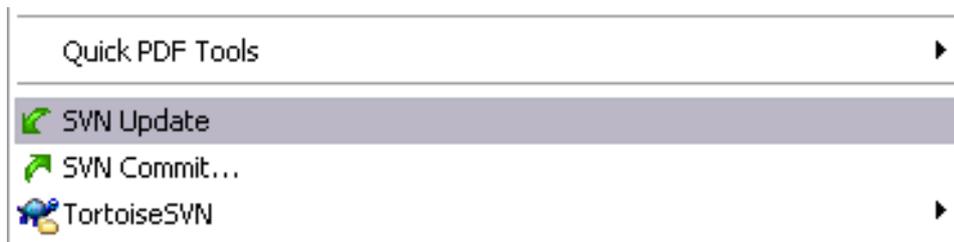- Right click on the folder and choose "SVN Update".

Figure 6: SVN Update

c.) Committing new documents (uploading)

- Save the document in an appropriate location within the folder created in the chapter above.
- Right click on the new file and choose TortoiseSVN → Add. (A small + will be added to the icon of the file)
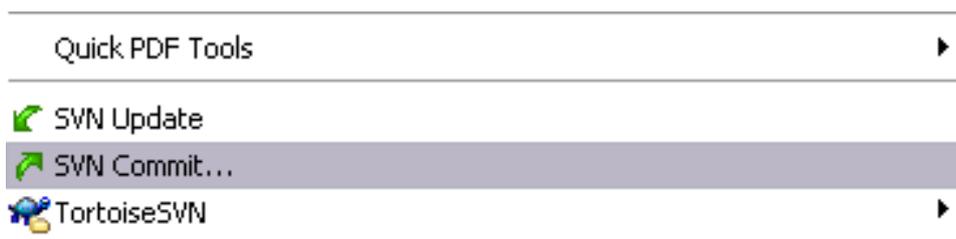- Right click on the file again and choose "SVN Commit..."

Figure 7: SVN Commit (a)

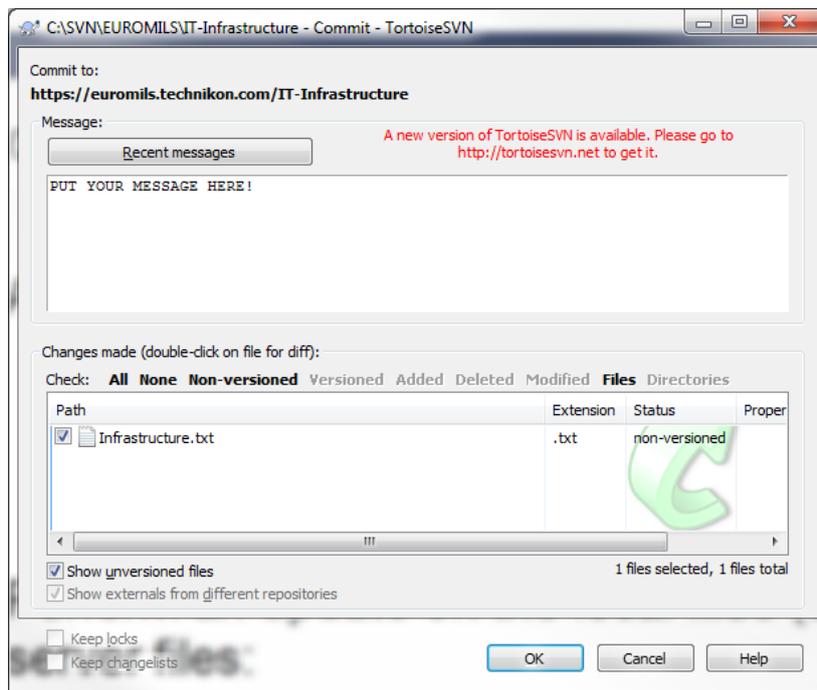- Enter a comment about the document and the updates you made.

Figure 8: SVN Commit (b)

2.2.2 Browser access

It's also possible to access the data through your Web Browser. *NOTE*: With the Web Browser you only have read-access to the data.
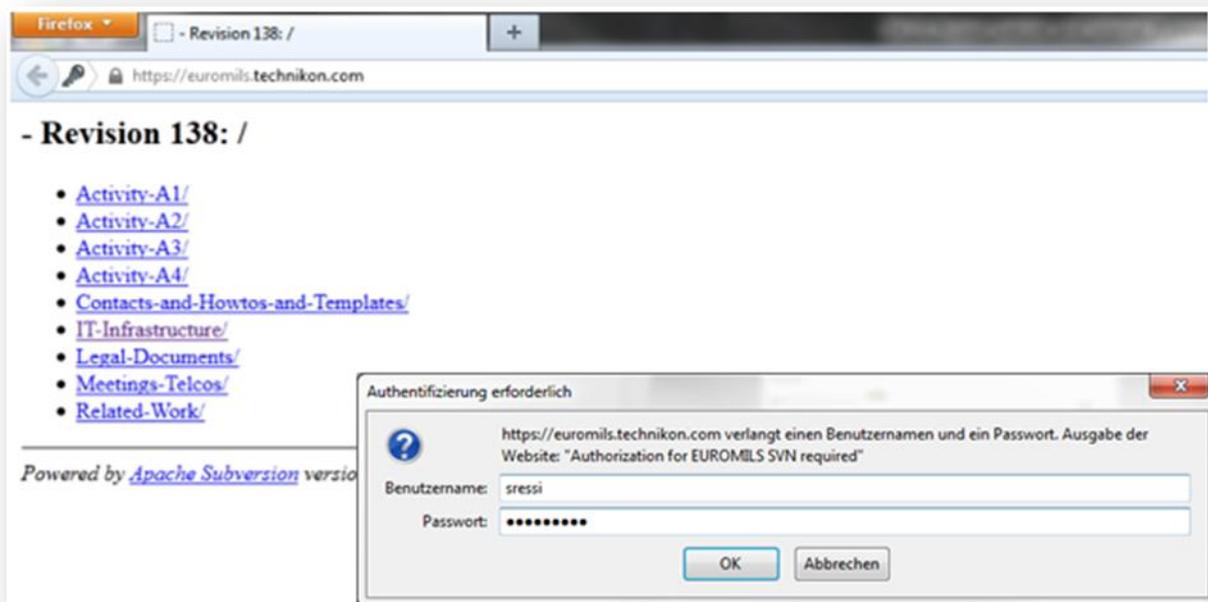

Figure 9: Browser access

2.3 Jabber chat server

An instant messaging server, based on the open Jabber protocol is maintained by the coordinator. The server provides a quick way to exchange a few words or transfer a file. It also supports multi-user conferences and has a built in User Directory. The service has been adapted to support access through corporate firewalls and a web client that will run on any recent java-script capable browser. Figure 10 shows the browser-based client, the login screen and a native Windows client called PSI (on the right).
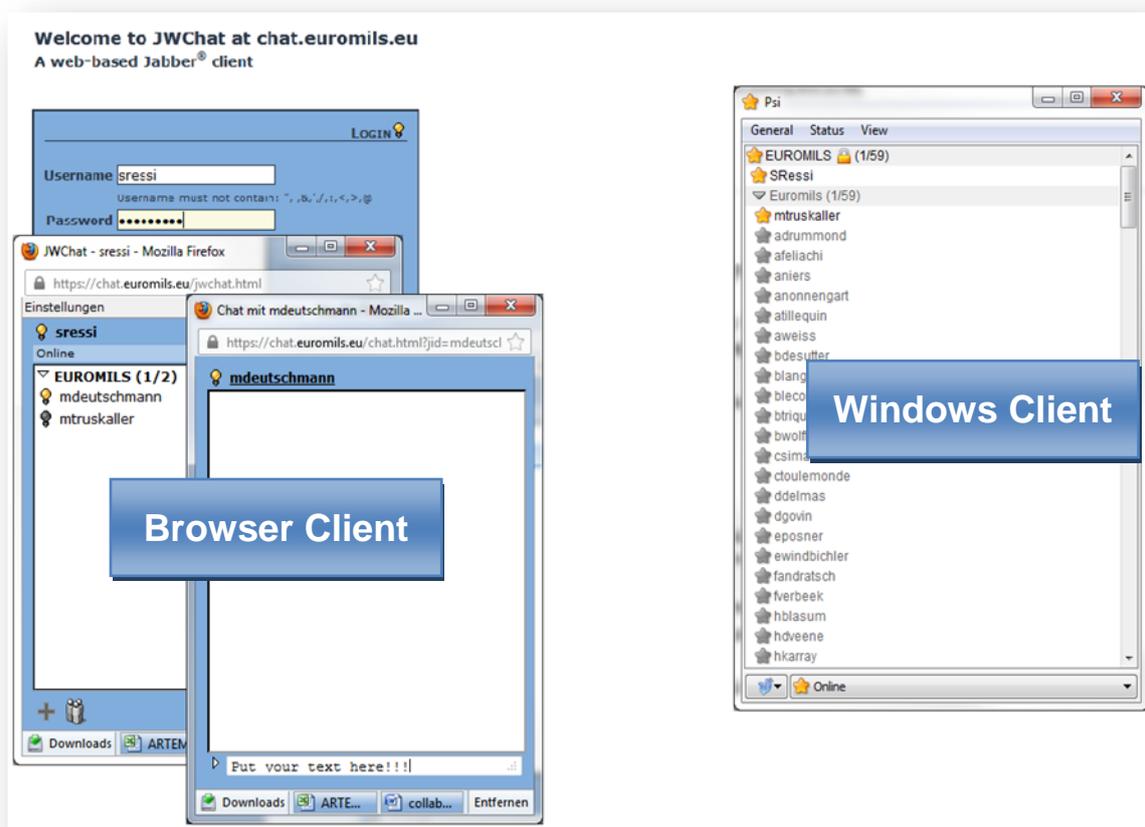

Figure 10: Jabber - browser-based Client vs. Windows client

The Jabber tool is reachable at the following link https://chat.euromils.eu. Jabber is a real-time communication tool, which allows chatting with online partners.

Two different kind of communications are possible:

- One-to-one chat: A group called "Everybody" will automatically appear on your roster when you connect to the service. This group contains all registered users. Simply double-click on a name to chat with that user.
- Group chat: choose join group chat in the PSI menu.
  - Host: **chat.euromils.eu**
  - Room: this can be almost anything – if it does not exist it will be created

If you would like to use this communication tool with a client, it requires the following steps:

- Download and install a client

  A list of clients is available at jabber.org - PSI is known to work in Windows and Pidgin is a cross platform solution used by some members of the consortium.

  When choosing something else, it is important to make sure that it supports encrypted connections.

- Username and password

  The username is the same as for the other EURO-MILS IT services.

- Connection to the server chat.euromils.eu

2.4 Mailing list server

A number of mailing lists are available to the project members for easy communication with a set of participants. Each Activity has its own mailing list and there are lists for the activity and work package leaders, legal personnel, activities etc. Subscriptions and other management tasks are done either via email commands or through the web interface in the protected workspace. Access is controlled by the coordinator to ensure the integrity of the lists.

Technikon has set up a mailing server with a wide range of different mailing lists, where all people who are responsible for the various sections are subscribed.

The different EURO-MILS mailing lists can be seen in the following table.

List	Address	Description
ALL	all@lists.euromils.eu	All active team members
General-Assembly	general-assembly@lists.euromils.eu	Members and deputies of the general assembly
Legal	legal@lists.euromils.eu	Legal experts/contacts of all partners
Executive-Board	executive-board@lists.euromils.eu	The activity and work-package leaders and deputies
Financial	financial@lists.euromils.eu	Personnel with financial responsibilities
SVN-Log	svn-log@lists.euromils.eu	Notifications for SVN activities
A1	a1@lists.euromils.eu	Mailing list for Activity 1
A2	a2@lists.euromils.eu	Mailing list for Activity 2
A3	a3@lists.euromils.eu	Mailing list for Activity 3
A4	a4@lists.euromils.eu	Mailing list for Activity 4

Table 1: Mailing lists